BRUHATH BANGALORE MAHANAGARA PALIKE
YELAHANKA DIVISION

me of Work: Improvements Roads and Drains at Vikasa Badavane Main and Cross Roads Kempegowda Ward No-01 of Yelahanka Sub Division.

DETAILED ESTIMATE

Estimated Cost= 3000000.00

No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	CIVIL WORK								
1	Removing & Refixing stone slabs of drains and pointing in C.M (1:3) (KPWD SR 2018-19, Page No.27, Item No.5.33)								
		Sqm							
	For Box Drain								
	4th main 33rd Cross in Vikas Lauout		2	120.00		1.50	360.00		
	Drain Covering Slab								
	Maruthinagar 4th Main 5th Cross		2	100.00	0.90		180.00		
	Maruthinagar 4th Main 3rd Cross		2	120.00	0.75		180.00		
	Maruthinagar 4th Main 1st Cross		2	125.00	0.75		187.50		
	Maruthinagar 2nd Main 16th Cross		2	55.00	0.75		82.50		
							990.00		
			10% for Damage & Missing				-99.00		
						Total Quantity	**891.00**	**111.30**	**99168.30**

Rate Analysis	
Basic Rate	105.00
Area Weightage @6%	6.30
Total Amount	**111.30**

2	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (KPWD SR 2018-19, Page No.143, Item No.19.1)								
		Cum							
	Desilting of Drain								
	4th main 33rd Cross in Vikas Lauout		2	120.00	0.60	0.35	50.40		
	Maruthinagar 4th Main 5th Cross		2	100.00	0.60	0.45	54.00		
	Maruthinagar 4th Main 3rd Cross		2	120.00	0.60	0.45	64.80		
	Maruthinagar 4th Main 1st Cross		2	125.00	0.60	0.45	67.50		
	Maruthinagar 2nd Main 16th Cross		2	55.00	0.60	0.45	29.70		
						Total Quantity	**266.40**	**206.80**	**55091.52**

No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Rate Analysis								
	Basic Rate	130.00							
	Area Weightage @6%	7.80							
	Lead for 5Km (2x1.2x5)	12.00							
	Loading & Unloading	57.00							
	Total Amount	**206.80**							
3	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (KPWD SR 2018-19, Page No.13, Item No.4.6)								
		Cum							
	For Coping								
	Maruthinagar 4th Main 5th Cross		4	100.00	0.15	0.075	4.50		
	Maruthinagar 4th Main 3rd Cross		4	120.00	0.15	0.075	5.40		
	Maruthinagar 4th Main 1st Cross		4	125.00	0.15	0.075	5.63		
	Maruthinagar 2nd Main 16th Cross		4	55.00	0.15	0.075	2.48		
						Total Quantity	**18.00**	**5747.32**	**103451.76**
	Rate Analysis								
	Basic Rate	5422.00							
	Area Weightage @6%	325.32							
	Total Amount	**5747.32**							
4	Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate								
		Sqm							
	For Missing & Damage from Item No. 01						99.00		
						Total Quantity	**99.00**	**2337.00**	**231363.00**
	Rate Analysis								
	Basic Rate	2337.00							
	Total Amount	**2337.00**							
	ROAD WORK								
5	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (KPWD SR 2018-19, Page No.143, Item No.19.14)								
		Cum							
	For Damage Porstion								
			1	5.00	2.00	0.20	2.00		
			1	2.00	2.00	0.20	0.80		
			1	3.00	2.00	0.20	1.20		
			1	1.50	1.50	0.20	0.45		
			1	2.00	2.00	0.20	0.80		
			1	3.00	1.00	0.20	0.60		
			1	2.00	2.00	0.20	0.80		

Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
			L in m	B in m	D in m			
		1	1.50	2.00	0.20	0.60		
		1	5.00	2.00	0.20	2.00		
		1	3.00	1.50	0.20	0.90		
		1	2.00	1.50	0.20	0.60		
		1	2.00	1.20	0.20	0.48		
		1	3.00	1.00	0.20	0.60		
		1	3.00	1.50	0.20	0.90		
		1	5.00	1.00	0.20	1.00		
		1	3.00	2.00	0.20	1.20		
		1	2.50	2.00	0.20	1.00		
		2	3.00	2.50	0.20	3.00		
		1	3.00	1.50	0.20	0.90		
		2	2.50	2.00	0.20	2.00		
		1	3.00	2.00	0.20	1.20		
		2	5.00	1.50	0.20	3.00		
		1	1.50	1.50	0.20	0.45		
Reconstruction								
4th main 33rd Cross in Vikas Lauout		1	35.00	5.00	0.45	78.75		
						Total Quantity	**105.23**	**55.46**	**5836.06**

Rate Analysis	
Basic Rate	41.00
Lead for 5Km (1.2x2x5)	12.00
Area Weightage @6%	2.46
Total Amount	**55.46**

6	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3 (KPWD SR 2018-19, Page No.147, Item No.19.64)								
		Sqm							
	Reconstruction								
	4th main 33rd Cross in Vikas Lauout		1	35.00	5.00		175.00		
							Total Quantity	**175.00**	**6.36**	**1113.00**

Rate Analysis	
Basic Rate	6.00
Area Weightage @6%	0.36
Total Amount	**6.36**

7	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision. (KPWD SR 2018-19, Page No.153, Item No.20.5)								
		Cum							
	For Damage Porstion		1	5.00	2.00	0.10	1.00		
			1	2.00	2.00	0.10	0.40		
			1	3.00	2.00	0.10	0.60		
			1	1.50	1.50	0.10	0.23		
			1	2.00	2.00	0.10	0.40		

Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
			L in m	B in m	D in m			
		1	3.00	1.00	0.10	0.30		
		1	2.00	2.00	0.10	0.40		
		1	1.50	2.00	0.10	0.30		
		1	5.00	2.00	0.10	1.00		
		1	3.00	1.50	0.10	0.45		
		1	2.00	1.50	0.10	0.30		
		1	2.00	1.20	0.10	0.24		
		1	3.00	1.00	0.10	0.30		
		1	3.00	1.50	0.10	0.45		
		1	5.00	1.00	0.10	0.50		
		1	3.00	2.00	0.10	0.60		
		1	2.50	2.00	0.10	0.50		
		2	3.00	2.50	0.10	1.50		
		1	3.00	1.50	0.10	0.45		
		2	2.50	2.00	0.10	1.00		
		1	3.00	2.00	0.10	0.60		
		2	5.00	1.50	0.10	1.50		
		1	1.50	1.50	0.10	0.23		
Reconstruction								
4th main 33rd Cross in Vikas Lauout		1	35.00	5.00	0.15	26.25		
						Total Quantity	**39.49**	**1994.92**	**78779.39**
Rate Analysis								
Basic Rate	1882.00							
Area Weightage @6%	112.92							
Total Amount	**1994.92**							
B	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (KPWD SR 2018-19, Page No.155, Item No.20.18)							
	Cum							
For Damage Porstion								
		1	5.00	2.00	0.15	1.50		
		1	2.00	2.00	0.15	0.60		
		1	3.00	2.00	0.15	0.90		
		1	1.50	1.50	0.15	0.34		
		1	2.00	2.00	0.15	0.60		
		1	3.00	1.00	0.15	0.45		
		1	2.00	2.00	0.15	0.60		
		1	1.50	2.00	0.15	0.45		
		1	5.00	2.00	0.15	1.50		
		1	3.00	1.50	0.15	0.68		
		1	2.00	1.50	0.15	0.45		
		1	2.00	1.20	0.15	0.36		
		1	3.00	1.00	0.15	0.45		
		1	3.00	1.50	0.15	0.68		
		1	5.00	1.00	0.15	0.75		
		1	3.00	2.00	0.15	0.90		
		1	2.50	2.00	0.15	0.75		
		2	3.00	2.50	0.15	2.25		
		1	3.00	1.50	0.15	0.68		
		2	2.50	2.00	0.15	1.50		

Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
			L in m	B in m	D in m			
		1	3.00	2.00	0.15	0.90		
		2	5.00	1.50	0.15	2.25		
		1	1.50	1.50	0.15	0.34		
Reconstruction								
4th main 33rd Cross in Vikas Lauout		1	35.00	5.00	0.20	35.00		
						Total Quantity	**54.86**	**2001.28**	**109790.22**

Rate Analysis	
Basic Rate	1888.00
Area Weightage @6%	113.28
Total Amount	**2001.28**

KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. Clause 502 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.6)

	Sqm							
For Damage Porstion								
		1	5.00	2.00		10.00		
		1	2.00	2.00		4.00		
		1	3.00	2.00		6.00		
		1	1.50	1.50		2.25		
		1	2.00	2.00		4.00		
		1	3.00	1.00		3.00		
		1	2.00	2.00		4.00		
		1	1.50	2.00		3.00		
		1	5.00	2.00		10.00		
		1	3.00	1.50		4.50		
		1	2.00	1.50		3.00		
		1	2.00	1.20		2.40		
		1	3.00	1.00		3.00		
		1	3.00	1.50		4.50		
		1	5.00	1.00		5.00		
		1	3.00	2.00		6.00		
		1	2.50	2.00		5.00		
		2	3.00	2.50		15.00		
		1	3.00	1.50		4.50		
		2	2.50	2.00		10.00		
		1	3.00	2.00		6.00		
		2	5.00	1.50		15.00		
		1	1.50	1.50		2.25		
Reconstruction								
4th main 33rd Cross in Vikas Lauout		1	35.00	5.00		175.00		
						Total Quantity	**307.40**	**33.92**	**10427.01**

Rate Analysis	
Basic Rate	32.00
Area Weightage @6%	1.92
Total Amount	**33.92**

Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
			L in m	B in m	D in m			
KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications. Clause 501 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.2)								
	Sqm							
For Existing Surface								
4th main 33rd Cross in Vikas Lauout		1	120.00	5.00		600.00		
Maruthinagar 4th Main 5th Cross		1	100.00	5.00		500.00		
Maruthinagar 4th Main 3rd Cross		1	120.00	5.00		600.00		
Maruthinagar 4th Main 1st Cross		1	125.00	5.00		625.00		
Maruthinagar 2nd Main 16th Cross		1	55.00	5.00		275.00		
Deduction for Primer Coat						-132.40		
						Total Quantity	**2467.60**	**5.30**	**13078.28**
Rate Analysis								
Basic Rate	5.00							
Area Weightage @6%	0.30							
Total Amount	**5.30**							
KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision - do - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (KPWD SR 2018-19, Page No.160, Item No.21.17.6)								
	Cum							
For Dipression Filling								
4th main 33rd Cross in Vikas Lauout		2	120.00	1.00	0.05	12.00		
Maruthinagar 4th Main 5th Cross		2	100.00	2.00	0.05	20.00		
Maruthinagar 4th Main 3rd Cross		2	120.00	2.00	0.05	24.00		
Maruthinagar 4th Main 1st Cross		2	125.00	2.00	0.05	25.00		
Maruthinagar 2nd Main 16th Cross		2	55.00	1.50	0.05	8.25		
Reconstruction								
4th main 33rd Cross in Vikas Lauout		1	35.00	5.00	0.05	8.75		
						Total Quantity	**98.00**	**8545.72**	**837480.56**
Rate Analysis								
Basic Rate	8062.00							
Area Weightage @6%	483.72							
Total Amount	**8545.72**							

	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	SRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications. Clause 503 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.7)								
		Sqm							
	For Existing Surface								
	4th main 33rd Cross in Vikas Lauout		1	120.00	5.00		600.00		
	Maruthinagar 4th Main 5th Cross		1	100.00	5.00		500.00		
	Maruthinagar 4th Main 3rd Cross		1	120.00	5.00		600.00		
	Maruthinagar 4th Main 1st Cross		1	125.00	5.00		625.00		
	Maruthinagar 2nd Main 16th Cross		1	55.00	5.00		275.00		
						Total Quantity	2600.00	12.72	33072.00
	Rate Analysis								
	Basic Rate	12.00							
	Area Weightage @6%	0.72							
	Total Amount	12.72							
13	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. – do – using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (KPWD SR 2018-19, Page No.162, Item No.21.78.12)								
		Cum							
	4th main 33rd Cross in Vikas Lauout		1	120.00	5.00	0.04	24.00		
	Maruthinagar 4th Main 5th Cross		1	100.00	5.00	0.04	20.00		
	Maruthinagar 4th Main 3rd Cross		1	120.00	5.00	0.04	24.00		
	Maruthinagar 4th Main 1st Cross		1	125.00	5.00	0.04	25.00		
	Maruthinagar 2nd Main 16th Cross		1	55.00	5.00	0.04	11.00		
						Total Quantity	104.00	9972.48	1037137.92
	Rate Analysis								
	Basic Rate	9408.00							
	Area Weightage @6%	564.48							
	Total Amount	9972.48							

Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
			L in m	B in m	D in m			
SRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (KPWD SR 2018-19, Page No.182, Item No.24.15)								
	Sqm							
Lane Marking								
4th main 33rd Cross in Vikas Lauout		2.5	120.00	0.10		30.00		
Maruthinagar 4th Main 5th Cross		2.5	100.00	0.10		25.00		
Maruthinagar 4th Main 3rd Cross		2.5	120.00	0.10		30.00		
Maruthinagar 4th Main 1st Cross		2.5	125.00	0.10		31.25		
Maruthinagar 2nd Main 16th Cross		2.5	55.00	0.10		13.75		
						Total Quantity	130.00	454.74	59116.20
Rate Analysis								
Basic Rate	429.00							
Area Weightage @6%	25.74							
Total Amount	454.74							
						Construction Total Amount		2674905.00
						Add GST Charges 12%		320989.00
						Sub Total		2995894.00
						Miscellaneous and unforeseen charges etc.L.S		4106.00
						Grand Total		3000000.00

Certificate:

1. The work spot has been inspected and found to be necessary
2. The provisions made in the estimate are necessary and minimum
3. The estimate is based on CSR of 2018-19 of Issue Rates on 02.11.2021

Assistant Engineer
Ward No-01
BBMP Bangalore

Assistant Executive Engineer
Yelahnka Sub-Division
BBMP Bangalore

Executive Engineer
Yelahanka Division
BBMP Bangalore

Administrative Approval

Accorded For .30.00 Lakhs.
Head of A/C...3726
CER NO :...64..... Dt:13/12/2021

AA CE (YNK)

Technical Sanction

Accorded For ..30.00 Lakhs.
Head of A/C...3726
CER NO :...67..... Dt:13/12/2021